

REMARKS

Applicants acknowledge receipt of the Office Action mailed December 6, 2006.

In the Office Action, the Examiner rejected claims 2 and 11 under 35 U.S.C.

§ 102(b) as being anticipated by *Jiwari et al.* (U.S. Patent Pub. No. 2001/0047849); rejected claims 3, 6, 8, 12, 13, and 15 under 35 U.S.C. § 103(a) as being unpatentable over *Jiwari* in view of *Xi et al.* (U.S. Patent Pub. No. 2003/0198754); rejected claims 7 and 14 under 35 U.S.C. § 103(a) as being unpatentable over *Jiwari* in view of *Rossman* (U.S. Patent Pub. No. 2003/0211735); and rejected claims 9 and 16-18 under 35 U.S.C. § 103(a) as being unpatentable over *Jiwari* in view of *Xi*, and further in view of *Rossman*.

In this Amendment, Applicants amend claims 2 and 11. Upon entry of this Amendment, claims 2, 3, 6-9, and 11-18 will remain pending. Of these claims, claims 2 and 11 are independent. Claims 1, 4, 5, and 10 were previously canceled, without prejudice or disclaimer, in the Amendment filed February 14, 2006.

The originally-filed specification, claims, abstract, and drawings fully support the amendments to claims 2 and 11. No new matter has been introduced.

Based on the foregoing amendments and the arguments that follow, Applicants traverse the rejections above and respectfully request reconsideration for at least the reasons that follow.

I. 35 U.S.C. § 102(b) REJECTION

Applicants traverse the rejection of claims 2 and 11 under 35 U.S.C. § 102(b) as being anticipated by *Jiwari*. Applicants respectfully submit that amended independent

claims 2 and 11 patentably distinguish over *Jiwari* at least for the reasons described below.

In order to properly establish that *Jiwari* anticipates Applicants' claimed invention under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Jiwari appears to disclose a semiconductor device including a reaction chamber 1, a plasma sheath 3, which is generated between a plasma glow region 2 and a substrate 4, a main exhaust pipe 30, and exhaust pipes 14. Exhaust pipes 14 are disposed on substantially the same plane as the plane on which an interface between the plasma glow region 2 and the plasma sheath 3 is located. (*Jiwari*, paragraphs [0041-0042] and Fig. 2).

Jiwari, however, does not disclose a first exhaust port of a first exhaust mechanism and a second exhaust port of a second exhaust mechanism connected via a common pump, as required by claims 2 and 11 (emphasis added). Instead, as illustrated in Fig. 2 of *Jiwari*, and disclosed in paragraph [0043], “exhaust pipes 14 are connected to a different vacuum pump than that connected to the turbo molecule pump 11 and the dry pump 12 provided for the main exhaust pipe 30” (emphasis added).

As supported by Applicants' specification at page 11, lines 3-5 and FIG. 3, “[t]he first exhaust port 105 and the second exhaust port 106 are connected to a common pump 133 via pipes 131, 132[,] respectively” (emphasis added).

Accordingly, with respect to independent claims 2 and 11, *Jiwari* fails to teach Applicants' claimed combination, including, *inter alia*:

"wherein the first exhaust port of the first exhaust mechanism and the second exhaust port of the second exhaust mechanism are connected with a common pump" (emphasis added).

Since *Jiwari* fails to disclose each and every element of independent claims 2 and 11, *Jiwari* fails to anticipate claims 2 and 11. Therefore, claims 2 and 11 are patentable over *Jiwari*.

II. 35 U.S.C. § 103(a) REJECTIONS

Claims 3, 6, 8, 12, 13, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jiwari* in view of *Xi*; claims 7 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jiwari* in view of *Rossmann*; and claims 9 and 16-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jiwari* in view of *Xi*, and further in view of *Rossmann*.

As explained above, *Jiwari* fails to teach or suggest, *inter alia*, "wherein the first exhaust port of the first exhaust mechanism and the second exhaust port of the second exhaust mechanism are connected with a common pump," as required by claims 2 and 11. *Xi* and *Rossmann* also fail to overcome this deficiency. The Examiner relies on *Xi* for allegedly disclosing "an apparatus...that includes a process chamber 10 with dual exhausts 18A, 18B, substrate support pedestal 46 and a lift assembly (hoisting/lowering mechanism) 48 that enables up/down movement of support pedestal[;]...that at any given moment either one, or both or none of the exhaust is open to cavity[; and]...a controller 70 that regulates the operation of various components of the processing

system..." (*Office Action*, p. 4, ll. 19-23); and *Rossmann* for allegedly disclosing "a substrate processing apparatus (Figure 7A) wherein a microwave generator 150 is used for generating plasma for cleaning of process chamber 113..." (*Id.* at p. 5, ll. 12-13). Such teachings, even if present in *Xi* and *Rossmann*, however, fail to teach or suggest, *inter alia*, "wherein the first exhaust port of the first exhaust mechanism and the second exhaust port of the second exhaust mechanism are connected with a common pump" (emphasis added). Therefore, *Jiwari*, *Xi*, and *Rossmann* fail to teach or suggest all of the limitations of claims 2 and 11, and claims 3, 6-9, and 12-18 are therefore patentable over *Jiwari*, *Xi*, and *Rossmann* at least due to their corresponding dependence from independent claims 2 and 11. Applicants therefore request that the rejection of claims 3, 6-9, and 12-18 under 35 U.S.C. § 103(a) be withdrawn and claims 3, 6-9, and 12-18 be allowed.

III. CONCLUSION

Applicants respectfully submit that claims 2, 3, 6-9, and 11-18 are in condition for allowance.

The Office Action contains characterizations of the claims and the related art with which Applicants do not necessarily agree. Unless expressly noted otherwise, Applicants decline to subscribe to any statement or characterization in the Office Action.

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge
any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: April 5, 2007

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